Figure 1

Figure 2a

232

231 230

229

228 227

226

224

205 206 222

215 208

207 220 218 210 213
I_1

216 θ 212
D_0 I_2
n_2 C_1

209 D_1

n_1 211 C_2

UEO 219

D_2
201 C_3
214
Iout
203 D_p
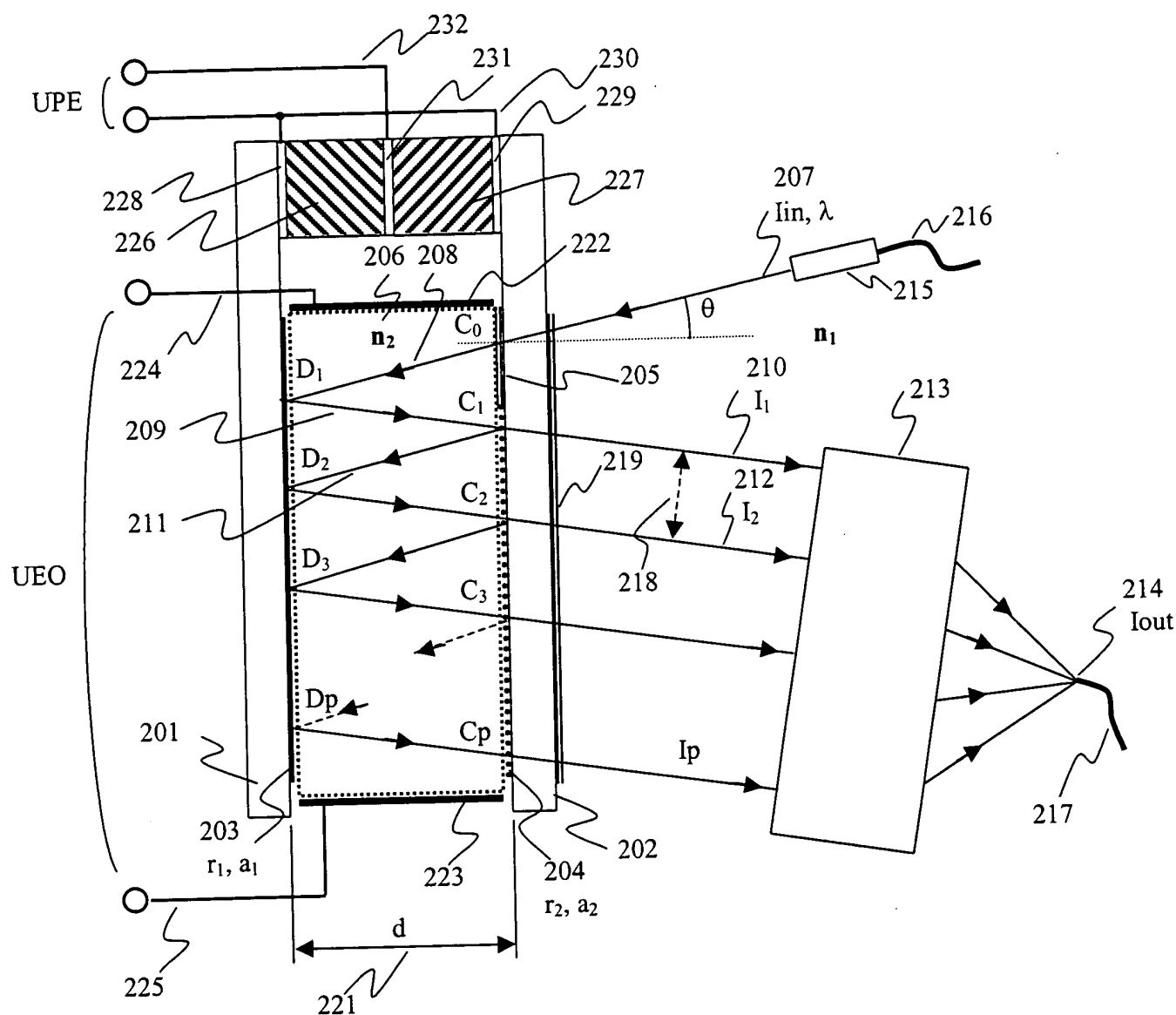r_1, a_1 C_p
I_p
225 202
223 217
204
r_2, a_2

d

221

Figure 2b
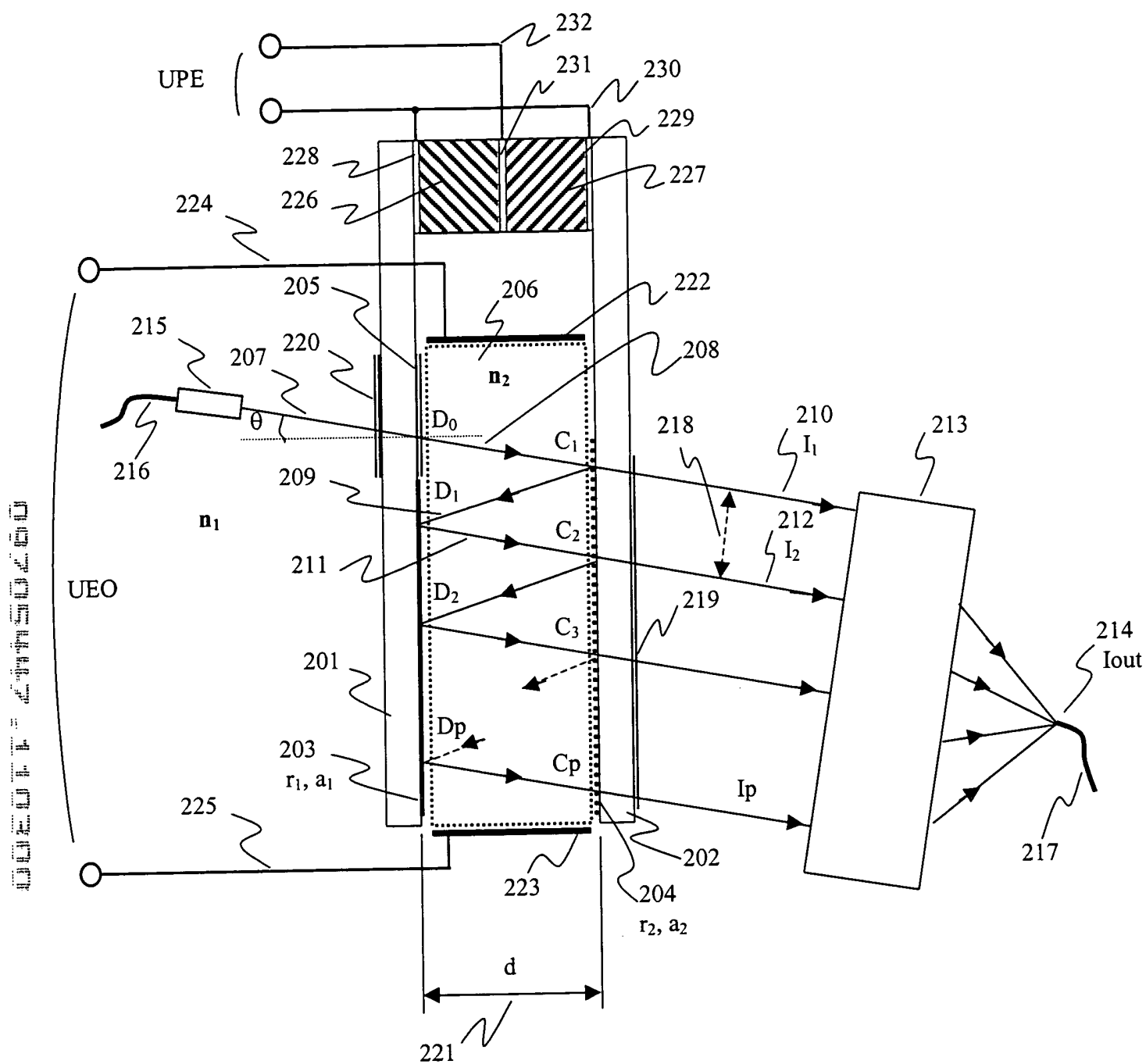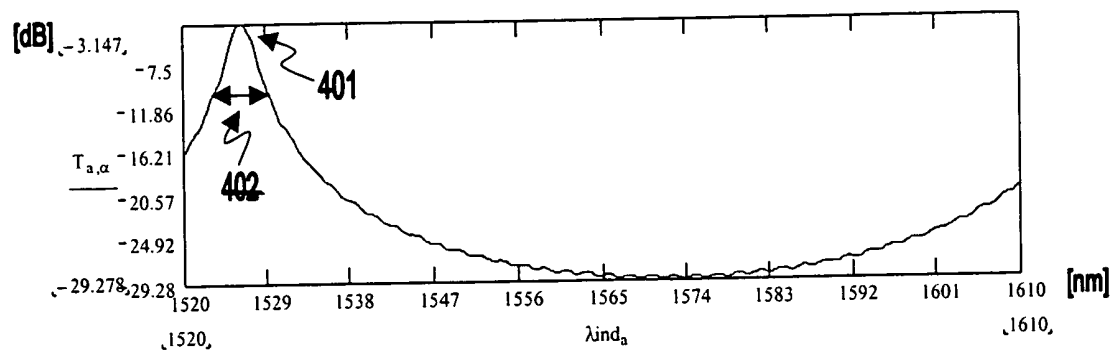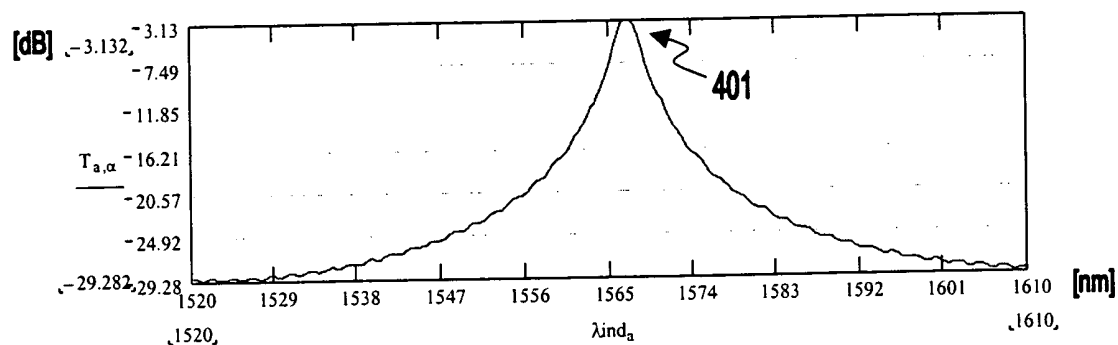
Figure 3

a) $d_1=12.971\mu m$, $\theta = 1.0°$; $r_1=0.985$, $a_1=0.006$; $r_2=0.92$, $a_2=0.006$

b) $d_2 = 13.317\mu m$; $\theta =1.0°$, $r_1=0.985$, $a_1=0.006$; $r_2=0.92$, $a_2=0.006$

c) $d_3=13.565\mu m$; $\theta =1.0°$, $r_1=0.985$, $a_1=0.006$; $r_2=0.92$, $a_2=0.006$

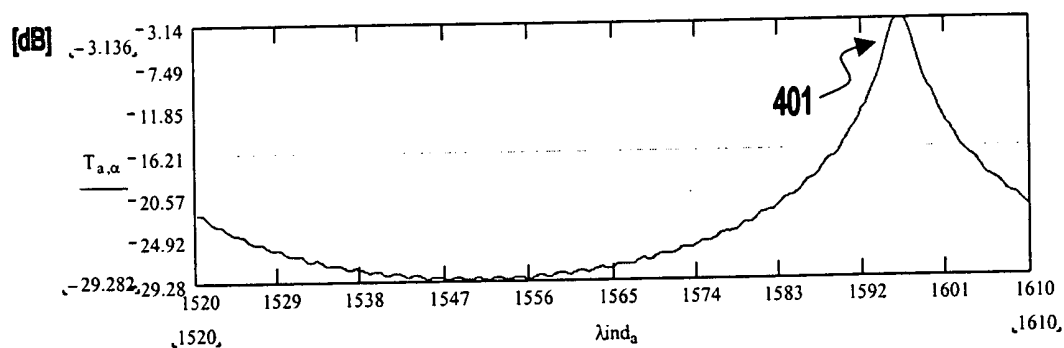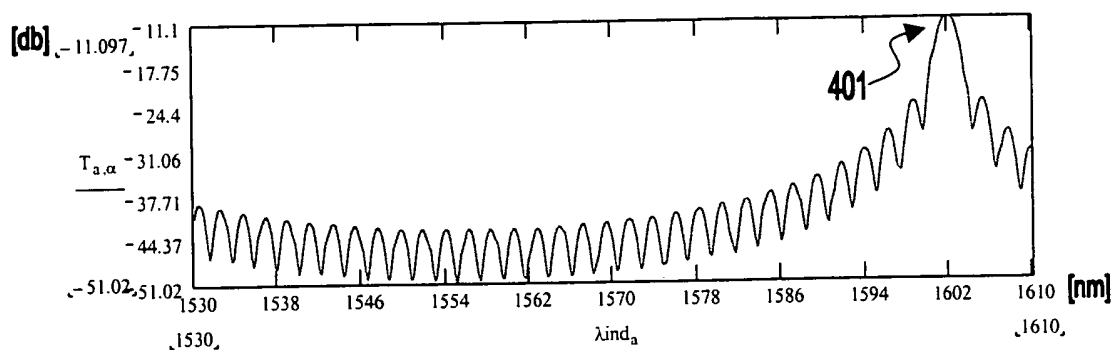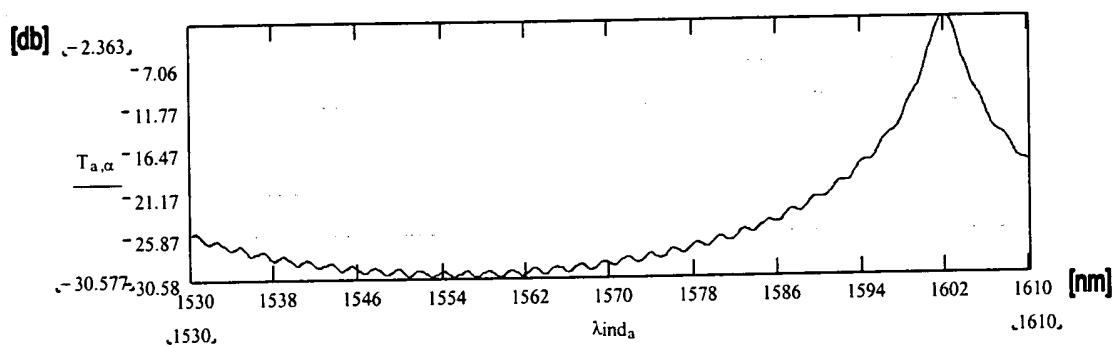Figure 4

a) $d_4=13.614\mu m$; $\theta=1.0°$, $r_1=0.995$, $a_1=0.004$, $r_2=0.985$, $a_2=0.004$

[db] -11.097, - 11.1
  - 17.75
  - 24.4
$\frac{T_{a,\alpha}}{}$ - 31.06
  - 37.71
  - 44.37
  -51.02, -51.02 1530 1538 1546 1554 1562 1570 1578 1586 1594 1602 1610 **[nm]**
  ,1530, λind_a ,1610,

401

b) $d_4=13.614\mu m$; $\theta=1.0°$, $r_1=0.995$, $a1=0.004$, $r_2=0.930$, $a_2=0.004$

[db] ,-2.363,
  - 7.06
  - 11.77
$\frac{T_{a,\alpha}}{}$ - 16.47
  - 21.17
  - 25.87
  -30.577, -30.58 1530 1538 1546 1554 1562 1570 1578 1586 1594 1602 1610 **[nm]**
  ,1530, λind_a ,1610,

c) $d_4=13.614\mu m$, $\theta=1.0°$, $r_1=0.995$, $a_1=0.004$, $r_2=0.830$, $a_2=0.004$

[db] ,- 1.338,
  - 4.74
  - 8.14
$\frac{T_{a,\alpha}}{}$ - 11.54
  - 14.94
  - 18.34
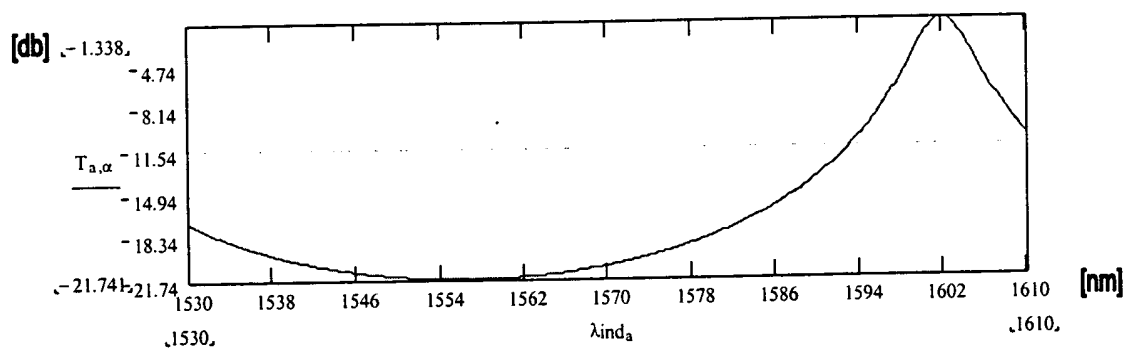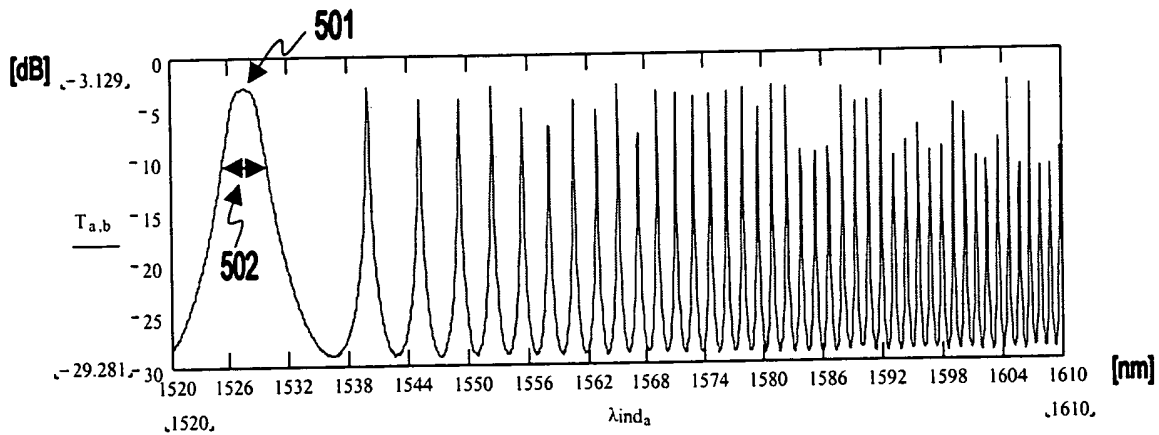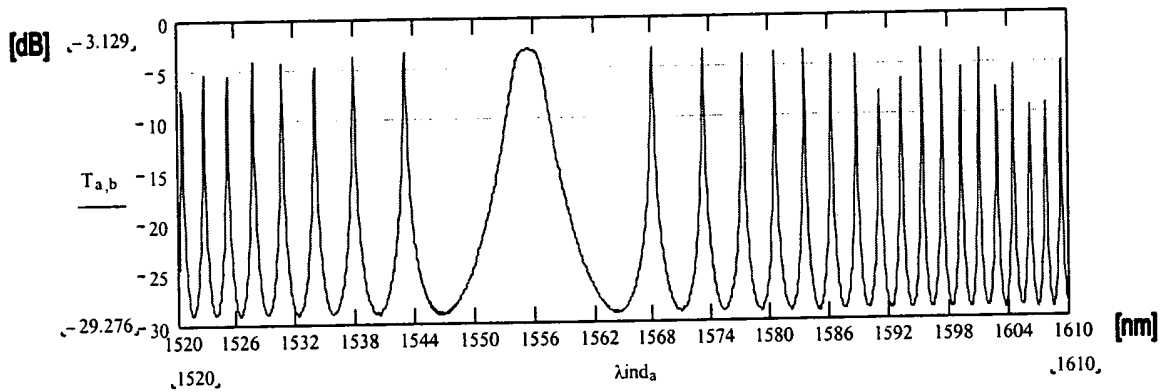 -21.74, -21.74 1530 1538 1546 1554 1562 1570 1578 1586 1594 1602 1610 **[nm]**
  ,1530, λind_a ,1610,

Figure 5

a) $d_5=11.65006mm$, $\theta=1.0°$, r1=0.985, a1=0.006; r2=0.92, a2=0.006

b) $d_6=12.080036mm$, $\theta=1.0°$, $r_1=0.985$, $a_1=0.006$; $r_2=0.92$, $a_2=0.006$

c) $d_7=12.850039mm$, $\theta=1.0°$, $r_1=0.985$, $a_1=0.006$; $r_2=0.92$, $a_2=0.006$

Figure 6
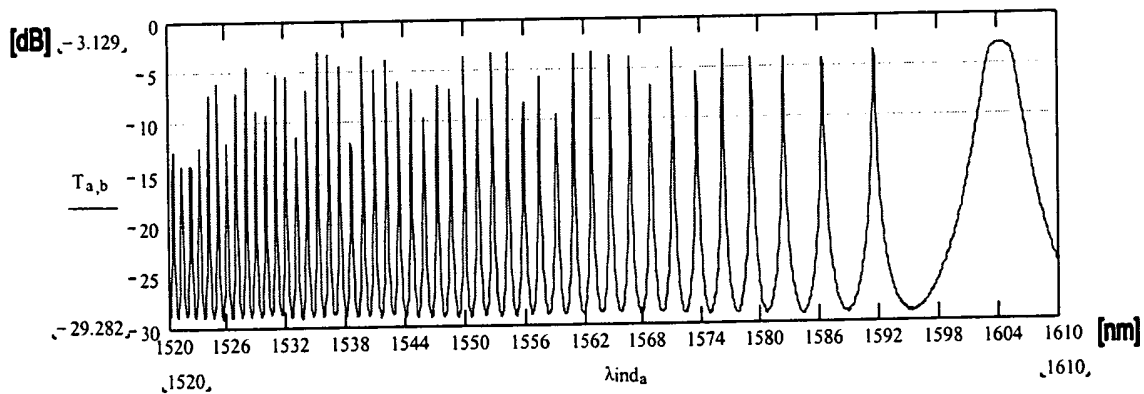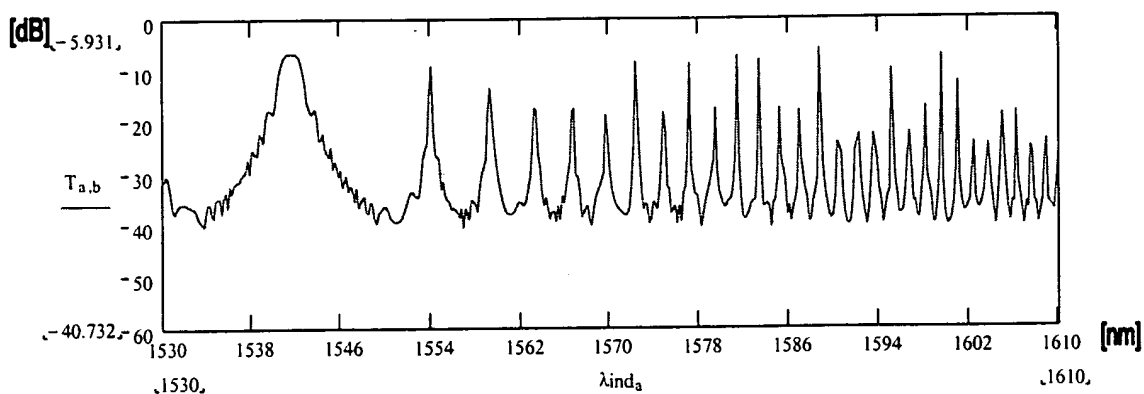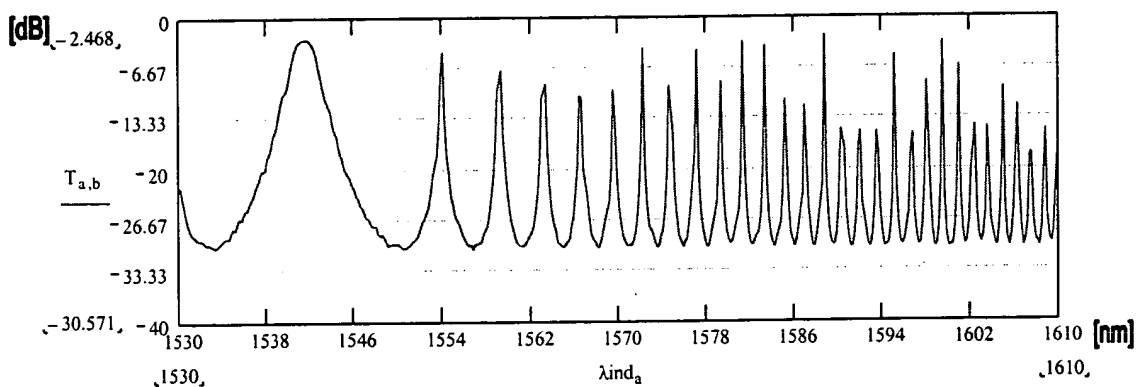
a) d_8=11.850244mm, θ=1.0°, r_1=0.995, a_1=0.004, r_2=0.970, a_2=0.004

b) d_8=11.850244mm, θ=1.0°, r_1=0.995, a_1=0.004, r_2=0.930, a_2=0.004

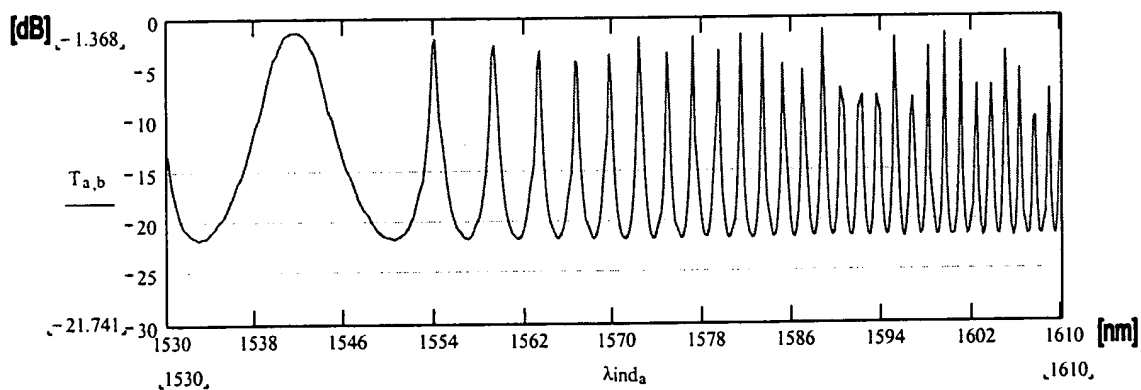c) d_8=11.850244mm, θ=1.0°, r_1=0.995, a_1=0.004, r_2=0.830, a_2=0.004

Figure 7